MODULE 5: Teaching Methodologies

Performance Objective for Module 5

- Given information in this module the student will demonstrate use of lecture, directed discussion, demonstrations, practical exercises, and collaborative learning teaching methods and understand what constitutes a learner-centered classroom. The demonstration and understanding will be considered successful if the student can answer 80% or better of the questions on a written quiz and completes the activity at the end of this module.

Introduction to Module 5

The teaching methods of primary concern in this course are lecture, directed discussion, demonstration, practical exercise, and cooperative/collaborative learning. Information about other methods is also included, however, it is most important that you have a solid understanding and can begin to use the five listed methods by the end of this course.

The classroom environment must be designed with the adult learner in mind. In the past, teaching was performed based on industrial efficiencies developed in the industrial revolution. New information indicates these methods; although efficient may not be the best for student learning.

Classroom Environments

Factory efficiency experts in the industrial revolution in the United States greatly influenced education. The work of Frederick Taylor, an influential industrial efficiency expert of the early 1900 has played an important role in educational reform through educations adoption of his work on factory efficiencies. These ideas continue today in the modern educational systems. The idea of one best efficient way to perform tasks has survived in classroom arrangements and efficiencies (Bransford, Brown, & Cocking, 1999; Rees, 2001).

Students need to learn at a different level than previous to meet the needs of industry. To do so requires variation from the learning environments established by the

industrial efficiencies. Researchers have identified a balance of four elements to establish a learning environment, learner centeredness, knowledge centeredness, assessment-centeredness and the idea of community in the classroom that interplay to create an atmosphere conducive to learning which can be transferred to other situations (Bransford, et al, 1999).

Learner-Centered Environments

The focus of a learner-centered classroom is on the knowledge, skills, attitudes, and beliefs, which students bring to the classroom. Andragogical theory is congruent with the learner-centered classroom in that one of the tenets is students must accept learning as being useful in order for them to spend the time to integrate it; and adults need immediacy of need of the information, for learning to occur (Knowles, 1974).

A learner-centered environment recognizes each learner's culture and language, and constructs of knowledge (Bransford et al, 1999; Thornton & McEntee, 1995). This environment allows everyone involved in the lesson to be equally important. Cultures, non-traditional ways of knowing information and active participation of each participant are actively sought and equally valued (Thornton & McEntee, 1995).

In the past, teaching in health care was focused on a teacher led, knowledge based, classroom. The teacher controlled information and knowledge, and students were expected to adapt or fail. However, research reveals movement toward more learner-centered classroom through development of tools such as learner-centered syllabi (Peer & Martin, 2005).

Knowledge-Centered Environments

The focus of a knowledge-centered environment is on the bodies of information to help students learn how to perform in a subject area. Student characteristics and needs are not considered. The student is expected to adapt and the information is more important than other considerations (Bransford et al, 1999).

Teachers who are more academically or knowledge inclined will teach and assess students differently than ones who are more affectively inclined. Academic teachers tend to be more explicit in what constitutes good work and more often described students who

perform well cognitively as the good students. While affectively inclined teachers, while less able to relate what constitutes good work, valued a cooperative attitude in students (Prawat & Nickerson, 1985).

Assessment-Centered Environments

An assessment-centered environment will provide feedback to students about learning. The assessment can be performed at two levels. The first level is a formative assessment and provides feedback on which to improve teaching and learning throughout the lessons. A summative assessment is one that occurs after teaching and learning has taken place; it evaluates the compendium of knowledge gained by students (Bransford et al, 1999). Teachers' attitudes toward students will affect the assessment of student progress. Students who are perceived as being a poor learner will be rewarded more for successes, and punished less for failures.

Conversely, students who are perceived to have high ability will be rewarded less for successes, and punished more for failures. Research has shown that teachers felt pride if a learner, who was perceived to have a low ability suddenly put forth more effort, the teacher could take credit for the extra effort. Teachers would also feel guilt if a perceived high ability student failed or quit trying. Teachers felt gratitude when a student succeeded, because in part the teacher felt successful if his or her students were successful. Students who vary in their level of effort could also produce feelings of gratitude on the part of the teacher. The teacher would feel he or she affected the students' efforts and gratitude resulted if the student succeeded (Prawat, Byers & Anderson, 1983).

Sense of Community

The sense of community in a classroom can be advantageous for students, if the values match their cultural values. However, if community norms and values do not mesh with a student's cultural norms and values, it may detract from learning. The four environments of a classroom must be balanced for effective teaching and learning to occur (Bransford, et al, 1999).

Motivation

Student motivation will affect how much of the learned knowledge will be transferred to a different contextual situation. Motivation can be increased or decreased by the level of knowledge taught; if the level is too high, students become frustrated and lose interest, too low, students may become bored and lose interest. In addition, a feeling of community in a class can increase student motivation (Bransford et al, 1999).

The perception of belonging to a community in the classroom was investigated to ascertain student participants' perceptions of feelings of belonging to a group as defined by the class. It was determined that stronger feelings of belonging would indicate perceptions regarding appropriate levels of teaching since students who felt a part of the community would identify with others in the class at the same levels.

Motivation is also affected by personality characteristics of learners. If students are learning oriented, he or she will be intrigued by new learning and motivation will increase with the presentation of new knowledge. However, if a learner is performance oriented, he or she may be focused on tasks and be concerned about making errors and scores on tests. Students with this orientation may experience a reduction in motivation resultant from fear (Bransford et al, 1999).

Motivation can also be affected by teachers' perceptions of students and the personality characteristics of teachers. A teacher who does not recognize differing cultures perceptions and values concerning education may fail to recognize the culture differences and perceive a student's level of learning or motivation incorrectly. Furthermore, a teacher who is academically or knowledge focused will produce more cognitive gain than a teacher who is affectively focused. Teachers who are academically focused will have different values and create a different learning environment for students, which will affect student motivation (Prawat & Nickerson, 1985).

Assessment

Two methods of assessment as defined in the literature are summative and formative. A summative assessment is the attempt to discern how much knowledge students have gained throughout the lessons. Summative assessments may be mid-terms

or final tests. The Idaho written registry examination for certified nursing assistants is an example of a summative assessment (Bransford et al, 1999).

Formative assessments are performed throughout the teaching period. These assessments are designed to provide the teacher with information on which to base needs for further teaching. An example of a formative assessment would be when the teacher questions the class of students to discover if students have gotten a concept (Bransford et al, 1999).

Assessment of student learning is a difficult task, which needs to be developed at the expected level of learning dictated by the goals of teaching. Two levels of learning and assessment are 1) learning and assessment of memorized facts and information and 2) learning and assessment of contextual knowledge in order to transfer the learning to other contextual situations (Bransford et al, 1999).

If the goal of teaching is to provide memorized facts, an assessment to measure facts and information gained is the correct method to use. However, if the goal is to teach students information with the ability to transfer that knowledge to other contextual settings such as a work environment, the assessment of learning and outcomes must be performed differently (Bransford, et al, 1999). It is important when developing curriculum to know at which level students must learn and to develop the assessment of learning at the proper level for valid measurement of the effectiveness of the learning that took place. The Idaho State Certified Nursing Assistant Curriculum Guide was focused on memorized facts and singular tasks, as were the State registry examination (Competencies for Nursing Assistants: A Curriculum Guide, 2001).

Transference of Knowledge from School to Work

Transfer of knowledge is important for students in that they must be able to use the information contextually when they enter the workforce. Transference is defined as the ability to apply knowledge learned in one context to other contextual situations. Thorndike theorized transference could be obtained depending upon how well the elements of the two situations matched (Thorndike, 1911). This theory led to a teaching style of drilling students on facts, but excluded learner characteristics, motivations, and abilities for creativity (Bransford, et al, 1999). Modern learning theory includes that

abstract representations of knowledge can enhance transference and that transference is an active, dynamic, process. All new learning involves transference of knowledge to a new level, based on previous learning (Bransford, et al, 1999; Knowles, 1974; Mergel, 1998; Miller, 2004; Phillips, 2005).

The abstract learning required for transference of knowledge for fluency of practice takes longer than simply teaching facts and information. Attempts to provide too many facts and information in too little time will provide students with disconnected learning, which cannot be easily transferred to work settings (Cogan & Schmidt, 1999). Students will obtain knowledge of facts without the underlying contextual principles to make them meaningful. If this method of teaching is used, students may misconceive their learning to be holistic, especially if the assessment methods used focus on recall of facts, not conceptual knowledge (Bransford, et al, 1999). Transfer of knowledge may be enhanced if students are provided opportunities to understand how to the information can be applied to other situations (Bransford, et al, 1999; Perkins & Salomon, 1989).

The transference of knowledge may be hindered by students' prior knowledge and culture. Novice teachers may not recognize when students are not learning because of disconnects between prior knowledge and new information (Bransford et al, 1999; Cogan & Schmidt, 1999; Ericsson & Charness, 1994; Prawat et al, 1992; Sabers et al, 1991). If the novice teacher does not have skills to recognize this problem, he or she may fail to help students integrate new knowledge. Furthermore, students with cultural backgrounds that differ from the teacher may participate in education in a manner that does not match teacher expectation, without teacher recognition of the disparity (Bransford et al, 1999; Cogan & Schmidt, 1999; Ericsson & Charness, 1994; Perkins & Salomon, 1989; Prawat et al 1983; Sabers, Cushing, Berliner, 1991). The disparity allows novice teachers to evaluate students' interests, beliefs, and motivations based on incorrect assumptions, affecting biased perceptions of students' academic levels. If a teacher perceives a student as unmotivated, or as a low-level learner they may mismatch instructional practices and student learning would be affected (Bransford et al, 1999).

Lecture Method

A lecture is a formal discourse intended for instructional purposes, the lecture method possesses certain advantages as well as some disadvantages.

Advantages

The lecture method is most effective when teaching new material to students. At this point, students often know little or nothing about the subject matter and must be given a foundation on which future lessons can be built. Using the lecture method allows a teacher to teach to large groups of students. This is because it is teacher controlled and centered.

Disadvantages

The formal lecture method does not allow the teacher to evaluate for student understanding of the material. The formal lecture method places an invisible shield between the teacher and the student. This can prevent feelings of rapport and support from developing between teacher and students. You should make sure to have a way to learn student names and call students by their name. Eye contact is important with students to help break down the shield and develop rapport.

A student placed in a formal lecture situation frequently becomes a passive learner. This does not enhance adult student learning, and may detract from retention of information. Students may grasp some of the information but it will be quickly forgotten. Adult students may loose interest in the presentation.

The presentation of too much information through a lecture is a danger. The teacher may become so wrapped up in the presentation as to loose contact with the class completely. The lecture will lose its vitality, and student interest will wane as a result. A formal teacher controlled and centered lecture uses one way communication, from teacher to student. Student participation and inquiry are thwarted and students may feel resentful.

How to Decrease or Eliminate Disadvantages

Lectures fail too often because they are misused. Teachers ask too much of the method. They fail to recognize a need for additional methods of instruction. Incorporation of teaching aids or illustrations into a lecture will help to decrease the separation of students from teacher. Also, inclusion of a demonstration into a lecture will break up the time so student interest is maintained. Interactive lectures, with student questioning technique can also be helpful. Using feedback devices such as a test, practical application or role play will help to draw students into the lesson and enhance learning.

By asking students direct recall questions, the learning situation becomes more interactive. The students' understanding and the teacher's effectiveness are checked. The presentation becomes more personal; the amount of material presented is limited and a line of communication between the teacher and students is established. However, take care to not ask questions then skip over waiting for student replies.

Animate your lecture style. Use your personal resources including voice, outward appearance, body control and vitality. Good teachers exploit their personal qualities to the fullest extent. Standing before a full length mirror and tacking stock in one's self can reveal a great deal. Voice recordings made during rehearsals can be helpful. If your voice sounds discordant to you, chances are it will sound the same way to the students. In presenting the lecture, your speaking technique should be natural, conversational, directed, animated, enthusiastic and well projected. Retaining student interest for any length of time is a difficult task at best. Your enthusiasm is catching, if you believe the subject matter you are teaching is interesting and your presentation represents that, student interest will be heightened.

The use of teaching tools will assist in lessening the boredom of a lecture. lesson plans, questions, charts, models, films and other training aids are items that are classified as impersonal resources that if well done, will help make sure your lesson stays on target, covers all required information, remains relevant, and holds student interest. The difference between a good teacher and a mediocre on depends on the degree of skill which he or she uses resources. Watch a teacher you think of as good. Make a mental note of how he or she uses tools.

Humor in the classroom can help to catch and retain student focus. Interjection of cartoons or stories can create relevance of material to real life situations. Never use humor to make fun of students! Judicial use of humor will help connect you to your students and to keep the lecture alive and energetic.

Factors Influencing the Selection of Lecture Method

Lecture method is suitable in a lesson in which the students have a very limited knowledge of the subject. Lecture is less suitable when the students already have a firm grasp of the subject matter.

A lecture may be the only practical way to provide information to students if the group is large. However, interjection of questions and illustrations can reduce student boredom.

Time limitations may require the use of lecture method.

If books and other learning materials are not available to students, but are at the disposal of the teacher during preparation, a lecture may be the only feasible method of presentation.

Some work-related material must be presented by an experienced teacher in the form of a lecture. This type of material needs to be interpreted and explained in terms of actual job experiences.

Preparing to Use the Lecture Method

Before choosing the method of delivery of any lesson you should develop the performance objectives. If you want students to learn material at the knowledge level,

lecture methodology would be congruent. Essentially this means if you want people to know about something, you should lecture. However, if you want them to be able to perform a skill you should choose a methodology that allows students to practice.

Organize your topics to tie lectures in with the course. Motivate your students by relating the information to why they need to know it. Make the lesson relevant to their work or life situation. If your performance objectives are stated in specific behavioral terms that students can understand they will know what is expected of them in the learning situation.

Before you provide a lecture, make sure your major topics are identified and in a logical order. If students ask questions, make sure you give thoughtful, controlled answers. Incomplete or verbose answers will only serve to confuse students. Use teaching aids to emphasize points in your lecture. Their use will break up the lecture and help prevent tedium. Using a questioning technique for interactive lecture will help stimulate student interest, allowing students to ask questions will help them to maintain interest in moving forward with information. If they have an unanswered question, they may loose track of the lecture and miss important learning. Work on your transitions from one point to the next. Smooth transitions from one point to the next will help students understand how the information builds upon itself.

If the lecture is long, be prepared to summarize the information periodically throughout the lecture. At the end of the lesson, identify the main points covered, the more difficult points in the lesson and the points that students should be sure to remember. Tie in the objective of the lecture to future lessons in the course. By establishing relevance to the students work or life situations will help students to retain the material.

Prepare in advance your teaching techniques for use in the lecture. If you plan to include examples, statistics, stories, job-related incidents, phraseology, visual aids, or additional instructional methods or techniques make sure they are ready and relevant to the topic.

Rehearse- if you are not comfortable with lecture, practice your lecture before class.
Revise- If you encounter problems during the rehearsal, revise your lesson plan.
Finalize- Have a finished lesson plan before you begin to teach your class.

Directed Discussion

Directed discussion is a student-centered methodology that is initiated by a thought provoking questions from the teacher. There are certain values to be weighed when considering the use of this method. These values will be helpful in deciding whether to select the directed discussion method and ultimately, what is can do for your classes.

Again, you must consider the level of learning you want your students to incorporate the learning. If students have had previous contact with information, facts, or principles students can apply their knowledge through directed discussions. This application will help the student develop an understanding of the subject. For example, you as the teacher will know that students not only know how to take a blood pressure, but can apply critical thinking in a scenario.

Stimulates Thinking to Related Areas

As a student begins to develop an understanding of the subject matter, he or she may be stimulated to relate this information to other area and in actual practice. For instance, a student learning the skill of taking a blood pressure may be able to distinguish if an elevated blood pressure is related to a disease process or stressful situations.

Encourages Participation

By relating new information to a known area retention of information increases. Through drawing comparisons between the known and the unknown, students' learning and retention of new material is increased through guided reasoning.

Though-Provoking Questions

Teachers have a responsibility to guide student's reasoning. This can be accomplished by use of thought-provoking questions. The question should require students apply previously learned factual information. This process will help the students develop a depth of understanding and the ability to apply theory to realistic situations.

Student Centered and Teacher Directed

As the teacher you can stimulate student discussions by facilitating their continuance. Discussions can be fostered through use of stimulating questions, situations and explanation and development of the advantages and limitations of the subject. The role of the teacher is to allow the discussion to be student centered, while preventing arguments or inappropriate debates and to ensure the discussion remains cogent and fitting to the subject.

Considerations in the Selection of Directed Discussion

Student Background

One of the primary factors to be considered when selecting a method is the background of the students. As noted, if a student has little or no subject matter background, the lecture method should be used to provide a factual, basic grounding in the subject. Aster presentation of the basic information, the teacher may employ directed discussions that promotes active student participation and provides an evaluation of students' depth of understanding. As student understanding increases, other methods can be employed such as demonstration, practical exercises, seminars, or pure conferences.

Time Allocation

The amount of time allotted for the lesson will help determine methods of instruction. Time allotment will vary with student background, time required by curriculum, and complexity of the subject matter.

Nature of Subject Matter

Complexity of the subject matter is vital in the determination of method of instruction. The more technical a subject, the more difficult it is to conduct a directed discussion. Students must be knowledgeable in the subject and thoroughly familiar with technical terms before this method can be employed successfully.

Teacher Proficiency

The teacher must be increasingly knowledgeable and proficient in the subject matter as student participation increases. Students will pose questions and problems that will require the teacher to draw on his or her background. Also the teacher must maintain complete control of the class at all times, because of the type of questions posed and the subsequent discussion.

Steps in Teaching

After selecting your method of instruction, you must determine the pattern of conducting the lesson. The pattern in directed discussion is essentially the same as it is in a lecture. The lesson must be introduced, logically developed, and conclusions reached and/or solutions to the problems posed during the discussion must be emphasized in the summary.

1. **Introduction**-This is the most critical phase in the directed discussion. The purpose must be presented in the introduction of the directed discussion just as in the lecture with questions. However, tie-in and objective must be stressed to give guidance to the discussion. The tie-in must be carefully detailed so students will feel they have sufficient background to participate in the discussion. This will also help to refresh their memory of previously studied information. The objective must be stated specifically so the discussion which follows can reach that objective. A vague objective will cause a hazy, rambling discussion.
2. **Discussion**-The teacher must predetermine the headings or major points that will achieve the objective. These headings are similar to the topics in a lecture plan. However, instead of planning to lecture on each topic the teacher must devise a way to have students discuss and reach conclusions regarding the points. One of the best ways to develop and promote discussion, as mentioned above, is the use of stimulating, provocative questions. These types of questions will show student's depth of understanding of facts presented in earlier lessons. Even with constant questioning there is no guarantee that all students will completely understand lesson material. In fact, an answer by one student may raise additional questions in another student's

mind. Periodic checks for comprehension provide the students with the opportunity to have questions answered. The discussion that develops during a lesson may result in inaccurate or negative contributions by students. Therefore, it is important these discussions be summarized at the conclusion of each phase. Otherwise, some students will be confused as to what has been decided. An effective directed discussion, therefore, includes periodic summaries of conclusions.

3. **Summary**-The third step in the presentation of the lesson is the final summary. A recap of main points should follow a directed discussion just as it follows a lecture. This recap should emphasize conclusions and solutions to problems set forth in the discussion phase of the lesson. The summary should conclude with a concise statement that introduces the next lesson. One effective means of stating this time-in is to give students a clear-cut goal for the next lesson.

Directed Discussion Lesson Plans

The lesson plan for the directed discussion differs slightly from that of a lecture. Discussions include provocative questions in the development portion, whereas lecture does not.

Heading

The usual provisions must be made in the heading for the subject, lesson title, and type of lesson, place, teaching aids, objective, and teacher and student references.

Introduction

As in the lecture method, the introduction will include four elements. These are: a tie-in with previous instruction; the objective of the lesson; an interest motivator; and the reason or purpose for the particular lesson. The objective should be limited in scope to

deter the tendency to wander or stray from the primary objective of the lesson. It is often helpful to emphasize the objective during the discussion phase.

Development

The development portion is organized by topics and sub-topics, with at least one main question and its answer under each topic. Provisions should also be made for periodic conclusions or topical summaries as the lesson develops.

Outline Procedure

The main questions and answers follow a very definite outline procedure in the directed discussion lesson plan. At least one question and the answer should be included under each main topic. If more than one question and answer are included under a main topic, that topic should be divided into sub-topics. Each sub-topic should then include one question and answer. The same system of enumerating topics and sub-topics used by the lecture format is used by the directed discussion format. Care must be taken not to include too much material in the development of the presentation.

Guide to the Teacher

As the discussion unfolds and ideas are expressed, the teacher will need a guide to keep on the correct path toward attainment of the objective. The questions in the lesson plan will serve this purpose.

Establishment of Time Cues

Time cues will help to assure the subject matter being taught will fit into the time allotted. The teacher should cover approximately one-third to one-half the amount of material, quantitatively speaking, that would be used in a lecture of equal length.

To estimate the amount of time required to present the introduction, questions, comments period, and summary must be subtracted from the total time allotted. This figure, divided by two, will give the approximate amount of presentation time to use so a balance of participation is allowed.

Attainment of a realistic time-material relationship is difficult. This hurdle may be overcome by practicing with some volunteers. The teacher should be prepared with sufficient questions to satisfy all student needs. He or she should have volunteers assume a subject matter background equivalent to the knowledge level of students. If there are no volunteers available, run the practice session by asking the question and answer it out loud. If you time your session, this will approximate the length of time needed for a directed discussion.

Summary

The final summary parallels a lecture summary. It includes an emphasis of the main points of the lesson and the conclusions reached. The tie-in to the next lesson should include a statement of the objective or goal.

Discussion Question Characteristics

Discussion questions must have certain characteristics if they are to show the depth of student understanding. They must:

- Have a specific purpose. The questions must be specific, requiring definite answers. This requires students to express his or her understanding of the facts that have been previously presented.
- Emphasize one point. The question should be worded so that one and only one concept or principle is involved. The wording should include a key word or cue to the answer or direction that the discussion should take.
- Understood by all. The question must be clear, simple, and precise. This will enable all students in the classroom to understand the intent of the problem posed. In addition, the questions must be worded so students cannot guess at answers, but rather express opinions based on known facts.
- Thought provoking. The questions must be provocative and not depend on memory for answers. This normally precludes use of simple what type of questions. Questions which are prefaced with how, why and or when will cause the students to apply facts and come up with answers based on their understanding of these facts. One effective means is to take the fact to be taught

and change the statement into a direct question. You can then reword the question so it can be discussed.

Questioning Techniques

The key to a successful directed discussion is good question technique. The teacher must understand the characteristics of a discussion question and how to get the most out of each response. Questions will arouse interest, hold the attention of students, lead students to analyze facts and materials, uncover individual weaknesses, reveal misunderstanding and test the effectiveness of the lesson.

- Build up. The build-up in a discussion question provides students with background and definite lines of thought and reasoning that the teacher wants them to follow. It will hold their attention through the use of personal experiences pertinent to the problem. Recall questions may be used in the build-up to channel students' thinking and refresh their memory of factual information.
- Asking the question. a procedure that will stimulate mental activity when presenting a question to students is to state the question, pause, then call a student by name to give a response. This is referred to as the A-P-C (ask, pause, call) technique.
- Ask. State the question to the entire group. This will stimulate mental activity among all students, because no one knows who will be required to respond.
- Pause. A slight pause after the statement or question will enable each student to think about the question and arrive at an answer.
- Call. The teacher should call a student by name to give a response. If the name of a student is called before the question is asked many member of the group will sit back and observe rather than think about a response.
- Follow-up. Distributing questions among the students is important. Students should not be called on in any order, nor should questions be limited to one per student. It is unwise to call exclusively on volunteer students. The students who seldom volunteer may need the experience of participation more than the volunteers. Follow up questions will:

- Guide the subject in depth. The use of follow up questions will keep the students on the right track in relation to the objectives and goals to be reached.
- Develop the subject in depth. The use of follow up questions will show the depth of student understanding. This is best achieved when the question if prefaced by how, why, and or when.
- Develop total student participation. Spreading the questions over the entire group of students will help stimulate active student participation. Guard against either staying with one student too long or not staying with a student long enough. This requires tact, common sense and judgment on the part of the teacher. Stay with a student long enough to allow him or her to express his ideas, but not so long that the remainder of the students become disinterested or inattentive.
- Provide a balance of participation. The balance of participation between the teacher and the class is important. The teacher should continually ask if he or she is doing too much of the talking. There is often a tendency for the teacher to dominate the discussion.
- Student-Teacher Relationships in Directed Discussions
- Discussions must be directed with care and precision for them to be productive. The success depends on the teacher's ability to control the discussion at all times.
- Be patient, cooperative and friendly. The first requirement of a teacher is to have a friendly, patient attitude toward each student. The teacher should convince the students that he or she is primarily concerned with their learning, not harassment of embarrassment.
- Prompt students. If a student is initially unable to answer a question, he or she should be given assistance in the form of hints or leading questions. Help the student give at least a partial response. Students will be much more inclined to participate during later lessons if they feel confident that their efforts will be accepted.
- Acknowledge and evaluate. A response to a question deserves recognition. The student who gives a good response should be complimented. The effect on class morale will be noticeable. On the other hand, if a response is not complete,

partially correct, or completely incorrect, do not let the student slide by. Stay with the question and student and guide him or her to the correct answer.

- Avoid repetition. Repetition of a student's response by the teacher wastes time. When the response if inaudible, ask the student to repeat it. Other students will quickly grasp the idea and direct their responses to the group rather than to the teacher. The teacher will then direct and guide training, rather than dominating it.

Demonstration Method

The logical procedure of telling, showing and them permitting students to try their wings is a normal teaching sequence. It is the showing phase that is of concern in the following discussion. The purpose is to teach the teacher how to organize and conduct a demonstration. In many cases we turn to the more formal methods of teaching such as lecture and discussion. However, practical exercises must be incorporated into training. Each practical exercise should be preceded by a demonstration. One of the requirements of effective teaching is a thorough knowledge of subject matter by the teacher. In any teaching situation, the skill of the teacher should be an ideal for students to follow.

A demonstration may be described as an accurate portrayal of a procedure, technique, or operation. In no other phase of teaching is a teacher's ability so apparent as in a demonstration. Properly presented it will not only show students what is expected of them, but what they can expect of the teacher.

The teacher demonstrates his or her ability both to tell how a process is performed and then do it. The effect of seeing a teacher perform a process is that it eliminates doubts and strengthens students' desire to do it. In addition, the demonstration sets the performance standards for the application phase that follows.

Value of Demonstrations

- Appeals to senses. A demonstration is an especially effective teaching method. It appeals to the sense of sight and many people learn more readily through the sense of sight than through any of the other senses.
- Realistic. The demonstration stimulates interest because it is realistic. As the students observe, they can identify with the movements and manipulations of the teacher. This adds impact to the learning process, and influences future behavior patterns.
- Saves time. Students can observe in a few minutes what might take several hours to explain by lecture or discussion, demonstrations save time.
- Sets performance standards. Teaching performance standards by demonstration shows the student how a given procedure contributes. For example, an automotive teacher sets up trouble in the ignition system of an engine, and then explains and performs various tests in the order and manner in which they should be made to teach a standard of automotive.

Uses of Demonstration Method

- Clarifies material. Material presented by verbal methods alone may be misunderstood or misinterpreted. The demonstration method can eliminate misconceptions and improve understanding. For example you might tell a student how to replace the bulb in an overhead projector, but unless he or she is familiar with the piece of equipment he or she may experience difficulties with this simple procedure. On the other hand, if you demonstrate how to replace a bulb while explaining the proper procedure, he or she will be better equipped to perform the job.
- Supplements other methods. The demonstration method is rarely used by itself. It is usually preceded and accompanied by an explanation employing either lecture or conference method, or both. When the demonstration is used to teach skills or techniques, it should be followed by practical work. It should not be considered a separate and distinct teaching method, but one to be used in

combination with other methods in presenting various kinds of subject matter. Although the demonstration is most commonly thought of as an introductory method of teaching skills and techniques, it can also be used to teach both knowledge and appreciation.

Preparation for Demonstrations

As with other teaching methods, careful planning is essential. Again, the demonstration must be planned and prepared with a clear statement of the objective in mind.

Just as a chain is only as strong as the weakest link, so too a demonstration will be only as successful as the ground work that has preceded it. A slip in a demonstration, an error in judgment, or the failure to plan and rehearse every detail may result in confusion. therefore, it is imperative every phase of the demonstration be planned and rehearsed in advance of the actual presentation.

Determine the objective

The objective of the lesson must be determined in advance. these objectives must fulfill the requirements set forth in the scope of the lesson. Once the objectives for the lesson have been determined, the next step is to list them, in the order they are to be taught. Next ask, "Can the objective of this lesson most adequately be met through the demonstration method?" If so, consider what you will need for material and equipment.

Research the Procedure.

Select the proper utensils and equipment necessary for an accurate step-by-step procedure. These items must be checked to see they are up-to-date and in perfect operating condition.

Organize Before-hand

The material should be logically organized. Students should be able to recognize distinct breaks between pauses or steps of the procedure being demonstrated.

Do a Dry-run

To insure each step is performed with accurate precision, repeat rehearsals are a must. The teacher can eliminate confusion if every detail has been planned and rehearsed prior to the classroom presentation. If assistants are involved, their role should be determined and checked in advance.

Use a Lesson plan

Construct and follow a written lesson plan. Lesson plans are essential to effective teaching regardless of the method of instruction. The use of a lesson plan is particularly important in demonstrating skills and techniques. Teaching a skill involves the development of exact habits or techniques. In order to develop these habits quickly, the teacher must demonstrate a definite step-by-step procedure for performing the operation.

Presentation of a Demonstration

There are six steps in presenting a demonstration.

1. Introduce the lesson. As with a lecture or a directed discussion, the introduction to a demonstration lesson contains four basic elements: a tie-in to previous instruction, a statement of the objective, the reason, and the motivator. In a demonstration there is another element. This fifth element is called the key questions. These questions relate to the important concepts in the demonstration. They provide effective stimulators to around interest and curiosity. it is beneficial to student learning and to help focus attention of the demonstration, for the teacher to present key questions to students before the demonstration begins. Their main function is to serve as the basis for the critique that will follow. During the critique, these questions are posed to see how well students have grasped the main concepts of the demonstration.
2. Preview. The step following the introduction and preceding the actual demonstration is called the preview. The preview is a brief statement of the demonstration.
3. Demonstration. A combination of show and tell results in a highly effective demonstration. There are several techniques for demonstrating materials that should be remembered. The demonstration should be visible to all students. Good planning and constant attention should be given to the arrangement of

students to insure everyone can see the demonstration. Classroom demonstrations should allow for variable seating arrangements. When a demonstration requires the class stand around a display, the teacher should insure everyone can see by having the class form a semi-circle, and by having those who press forward move back out of the line of sight of those in the rear. It is important the teacher see each student to know if they understand the presentation.

Aids and equipment used in the demonstration can distract the class if they are placed on display before the time of the demonstration. The teacher should organize equipment in the order in which it will be demonstrated.

Follow a logical sequence. Perform the demonstration in a logical sequence, telling and showing as you go. Include frequent student checks. One of the teacher's most valuable evaluation techniques is questioning. Questions should be asked so each student thinks he or she will be called to answer. Not only can the teacher evaluate success of the presentation through questions, but also use them to emphasize important points. The teacher must also provide time for and encourage questions from the class. Each question deserves a response as if it were asked by the entire class. If one student does not understand a concept, there are probably others in the same situation.

4. Maintain safely standards. Safety must be a part of every demonstration. Because the best way to accomplish any job is also the safest way, the teacher should stress the key points of safety at each step. With practice, speed will come naturally when a high standard of safety and performance is maintained.
5. Critique. The purpose of the critique is to answer key question revealing the degree of understanding attained by students as a result of observing the demonstration. It also affords students opportunities to ask questions about any phase of the demonstration.
6. Summarize. Just as in other methods of presentation, the demonstration includes a summary. Here, the steps involved in the demonstration are enumerated and emphasized. As each phase is mentioned, key points should be reiterated. When summarizing, the phases must be presented in exactly the

same order as they occurred in the demonstration. No phase should be omitted.

An effective demonstration requires careful preparation. A definite outline of procedure is necessary. The lesson plan involves:

- First determining the specific purpose of the demonstration.
- Second, studying the procedures to be presented.
- Third, preparing the performance steps in proper order.
- Fourth anticipating the steps requiring additional teaching.

Practical Exercise

Educational psychologists agree students learn best by doing. But before students engage in a practical exercise, they should have a thorough understanding of the necessary principles and concepts. This methodology of learning theory in the classroom and then applying it in a realistic exercise is essential to effective learning. Some programs devote as much as 80 percent of instructional hours to practical application.

As a teacher you will often find yourself responsible for preparing, conducting and supervising practical exercises. The practical exercise is a method that enables students to learn by doing.

Training Levels for Skill Development

Practical exercise is the method best suited for developing the ability to perform specific job tasks. However, beginning students do not have sufficient background to learn by doing. If a teacher employs other instructional methods in the proper sequence, the unskilled student will develop these technical skills. As always, students' background and the skill to be developed dictate the instructional method. Therefore, a teacher must carefully consider course objectives of basic knowledge, understanding, limited performance or skill to select the appropriate method.

When students have no prior knowledge of a skill, teaching by the lecture method is generally the only practical approach. For example, a teacher would not expect a new student to know the correct procedure for combing a patient's hair. In this case, the teacher would use a pure lecture format. As students acquire background, a lecture with

questions would allow student participation and provide for two-way communication. If the teacher's objective were to provide a basic knowledge of the subject matter, the lecture with questions would suffice. However, if the objective were to develop an understanding, additional training and other method of instruction would be necessary. You may want to begin with a lecture followed by a directed discussion, demonstration and practical exercise.

After acquiring sufficient background, students can develop depth and understanding by thinking out problems posed by the teacher. To insure success, the teacher must provide adequate buildup to the questions and follow student responses with further questions and appropriate comments.

When students' background is adequate and when the subject matter of available facilities do not permit use of a practical exercise, the directed discussion generally is unsurpassed as a method of instruction. In other instances, discussion is an excellent way to prepare students for a demonstration of the principles and procedures they will perform in their practical exercises.

Before students engage in practical exercises, they should observe a demonstration of what will be expected of them. The reasons for this are twofold. First, application of theory in the clinical area is quite different from the development of theory in the classroom. Often a student will have not questions during class, but questions will come to mind when classroom principles are applied. Second, a demonstration serves to establish standards of performance for students.

When taking students from a level of conceptual understanding to a level of limited performance, demonstrations are mandatory. Following a well-planned demonstration many students can perform similar tasks with only minimal supervision.

Because specific tasks often involve manipulative and manual skills, limited performance is inadequate. To obtain reliable independent performances from a graduate, practical exercise is necessary.

Choosing Practical Exercise Methodology

To choose a practical exercise you should consider the following information.

- Preparation. Preparation is vital for the success of any method of instruction. With the practical exercise, the teacher is not only preparing for him or her self, but also for the active participation of each student. A lesson plan must be prepared and rehearsal of the lesson must happen before the information is presented.
- Objective. The objective for any lesson provides both teacher and students with a tangible goal. A teacher cannot begin to prepare a lesson until it is known what he or she expects to accomplish. For students, the objective serves as a fundamental reference point and each step of the students' performance should relate to this goal. Forming a concise, realistic objective is not an easy task. Consideration of time limits, student level, facilities, and over-all course objectives will influence the objective for a single hour of practice. To frame the objective, a teacher should ask the following questions about performance, conditions, and criterion.
- What must the student do? Under what conditions must he or she be able to do it? What is the minimum standard of performance?
- Facilities. Once objectives have been determined, the teacher must arrange for adequate equipment. Training aids, safety measures, number of students, and classroom considerations such as heating and ventilation must be considered.
- Lesson plan. A lesson plan must be prepared when conducting a practical exercise just as it would be with any other method. Generally, the development of a practical exercise breaks down into four major teaching points: review of directions, problems, solutions, and critique.
- Dry-run. All lessons require rehearsal for a smooth and successful presentation. For the practical exercise, the teacher will want to pay particular attention to the dry-run to establish a realistic time/material relationship and to anticipate trouble spots in the application portion of the exercise. To guarantee materials are ready for student use, they should always be rechecked immediately before the exercise begins.

Variations in Types of Practical Exercises

Controlled Practice

Controlled practice is broken down into three steps. First, the teacher explains particular aspects of the entire operation in detail. Second, he or she demonstrates the operation. Third, the students talk through their own performance of the same operation. The teacher or an assistant are on hand to correct errors. The chief advantage of a controlled practice is it affords maximum control over student activity. Although controlled practice is ideal for initial student performance, it does not provide adequate training for independent performance. Students must practice operations in their entirety and learn to use personal initiative if they are expected to perform effectively with normal supervision.

Independent Practice

This type of practice allows students to perform particular operations or procedures completely and at their own speed. The teacher and assistants must be on hand to observe closely and correct errors. Though it usually follows controlled practice, independent practice may be used in the initial application phase when only basic skills or techniques are involved. For instance, during a lesson in reading a chart, the teacher would first explain and demonstrate how to interpret the information. In the following practical exercise, each student would work with a chart at their own speed.

Coach and Pupil

Once students have had controlled and independent practice, they can be paired off to work together as coach and pupil. One student performs while the other observes and then they exchange roles. This type of practice has several advantages. Students can learn from one another, both through successes and errors. If strong and weak students are paired, both will benefit. The strong student learns not only from his or her own performance, but from coaching the weaker student. The weak student has the benefit of a competent personal tutor. But, as with other types of practice, supervision by the teacher is essential.

Team Practice

Frequently, the performance of one person must be coordinated with the efforts of others. Team practice is essential for developing the efficient interaction of individuals for unit operation. Team practice may incorporate the features of either controlled or independent practice, or two teams could be brought together to work as a coach and pupil. Their objective is to learn timing, correct positions and procedures and to develop an appreciation for the efforts of the other team members.

Guidelines

In addition to selecting the proper type of practice for the performance of a practical exercise, the teacher should use the following eight principles, of guidelines for planning, conducting, and supervising practice.

1. Issue specific directions. Students must be informed of what they are to do, why they are to follow specific steps and what help is available. Capable teachers should be able to anticipate most questions and trouble spots and offer appropriate assistance.
2. Re-teaching of theory. Misunderstandings are bound to occur in any learning situation. One student may have misinterpreted the teacher, another may have come to erroneous conclusions, or the teacher may not have been clear. No matter how misunderstandings of theory occur, the teacher is responsible for spotting student errors and difficulties during the exercise and quickly making spot corrections in a patient and courteous manner, and providing direct assistance. If many students are having trouble with certain fundamental points, the teacher should halt the exercise and review and re-teach essential points of theory until students are capable of continuing on their own.
3. Progressive standards of achievements. During initial hours of application, emphasis should be placed on completeness and accuracy. Standards for each subsequent hour of applications should always be raised and the teacher should expect students to perform more quickly and exercise better judgment consistent with each repetition. The actual amount of improvement to be expected depends on the teacher's judgment, guided by the objective.

4. Realistic conditions. Students learn most effectively during a practical exercise if they understand the theory and are motivated to put that theory into use. Conditions for practice should closely resemble those that will be encountered on the job. Realistic conditions also make learning more challenging, providing motivation for either individual or team practice.
5. Strict applications of theory. To be of value, practical exercises should be based on an analysis of the actual tasks a student will have to perform on the job. The exercise should provide students with practice to meet these future demands. In turn, theory should be designed to provide necessary information, knowledge and understanding students need to perform his or her job. In a practical exercise, midway between classroom and job, theory must be put into practice exactly as taught, otherwise students will not be properly prepared to perform efficiently. When this occurs, the teacher should recognize students' initiative, but explain why recommended procedure is preferred.
6. Indirect assistance. The teacher must always be ready to provide assistance to students having difficulty. However, they must be careful to not assist students directly by giving the correct answer or taking over. Assistance should be given indirectly. Guided by recall questions from the teacher, students can analyze and solve problems on their own. This technique conditions students to rely on their own initiative and resourcefulness in the future.
7. Constant supervision. After initiating the exercise, the teacher should circulate throughout the entire group to see they are all off to a proper start. Students should never have to come to the teacher when they need help. The teacher should be constantly on the move, timing his or her appearance to provide a word of encouragement or necessary assistance. Several other factors also affect constant supervision. These are the size of class, number of available assistants, student's level, and time available. Though a one-to-one ratio between students and assistants is ideal, it is hardly realistic. Generally, one assistant can provide adequate supervision for three to ten students.

Teachers should also bear in mind that supervision must continue until the exercise has been completed. Students must continually be checked to see they are using equipment correctly, observing necessary safety measures, and following directions.

8. Progressive mastery of steps. A practical exercise is like a ladder, it consists of a series of connected steps and leads students from one level of learning to another. As with any other ladder, each rung should be taken separately and the climber should be on firm footing before continuing. Only the teacher can determine when students have successfully completed on step and are ready to move on to the next.

Presentation of a Practical Exercise

Introduction

The introduction to a practical exercise is similar to introductions to all other types of lessons. Though no one element can ever be said to be more important than another, the objective for a practical exercise should be especially emphasized. By doing so, the teacher helps ensure students understand exactly what they are to accomplish during the lesson. This also helps students relate each step of their performance to the completion of a particular task.

Review

After the introduction practical exercises should involve a brief but thorough review. Highlighting previous instructions, this review refreshes important information and provides a basis for the directions that will follow. The review also provides the teacher with an opportunity to check student progress before permitting them to perform the exercise. This portion of the lesson can also provide students with an opportunity to ask questions about key points of theory or procedure.

Directions

The next step is to give directions. Specific directions must always be given if students are expected to benefit from any exercise. If possible, directions should be

provided in a student handout or on the chalkboard. When issuing directions, the teacher should make frequent checks to see if students understand each step of the procedure. Even if one student fails to understand instructions, the practical exercise may be seriously delayed or disrupted. The following instructions should be included in preparation for the exercise:

- An overview of the sequence of activities contained in the exercise.
- Time allocations, physical facilities to be used, materials, equipment, etc.
- What assistance students can expect from the teacher
- How, or if students' performance will be evaluated.

Application

The actual application is the heart of the practical exercise and should be completely outlined either in the teacher's lesson plan or in a student handout for the exercise problem. Additionally, the teacher must decide how to handle the following tasks while students are performing the exercise.

Monitor student performance. Observe the specific skills or tasks decided upon. If the objectives are spelled out for the exercise, they will tell the teacher what he or she is looking for. If not, the teacher will have to make up a student performance check sheet. The list will make the teacher evaluation more objective.

Help students who are having trouble. Sometimes, a simple question will give students insight into problems. At other times, the teacher may have to step into his or her role and demonstrate how to perform the task. Reinforce student performance. If student performances are good, tell them. If they are having problems, be specific; sometimes all a student needs is a yes or no answer. Control physical resources and time. If students drop too far behind schedule early in the exercise, the teacher will find him or herself leaving out activities toward the end of the exercise in order to catch up and finish on time.

Critique

The critique is the final phase of instruction and should immediately follow the application. In development of the un-graded practical exercise, the critique is included

as the last major teaching point. Designed to review the lesson and emphasize steps of procedure, the critique helps give students a clear idea of correct and incorrect practices and techniques.

The critique provides the teacher with an additional opportunity to check students' over all understanding of operations, procedures, and principles. Only when students have learned the essentials should they be allowed to move on to the next phase or operation.

The critique is usually broken down into two sub-points.

- First a discussion of trouble spots and
- Second, clarification of misconceptions.

The teacher must plan for the critique just as he or she has planned for the rest of the practical exercise. During the exercise, he or she should look for examples of good and poor performance, take notes on techniques and procedures used, and measure achievement in terms of desired standards. Asking the key questions that address major points and the acceptable standards of the procedure should be incorporated in the critique.

Role Play and Case Studies

Teaching adults how to care for others, especially in an emergency situation can be a difficult task. Adults learn best if they can relate information to knowledge they already have or make sense of how the information will be personally helpful. Using a Case Study or Role Play are excellent ways to relate knowledge to past learning and real life scenarios.

Case studies can be used to help students analytically problem solve skills and put together theoretical knowledge with skills. Case Studies take a great deal of preparation on the part of the teacher to be successfully used in the classroom. An incompletely thought out lesson with a case study can distract students from the information and end up as a waste of valuable classroom time.

Role plays allow students to put knowledge and skills together in a low stress environment. This method is helpful to allow students to internally formulate plans of action based on theoretical learning. This allows a student to react in a real life situation

with the assurance they have already performed the correct actions and may help reduce stress levels associated with a first time performance in the field of practice.
The skill test required for placement on the State registry for EMT or CNA classes requires students be able to apply their knowledge in a role play situation. It is important to allow students time to practice in role play situations so they can be at ease in their examinations.

Cooperative Learning

Every teacher should use cooperative learning strategies with adults at least sometime during the course of instruction!

Adult learners as well as other age groups, find cooperative learning groups very much to their liking. Learners experience a non-threatening environment and they are able to share and learn from each other. They are amazing in what they accomplish and are proud when they achieve the goal or complete a project.

Cooperative learning is the instructional use of small groups led by the teacher so students can work together to accomplish snared goals for the benefit of themselves and all other group members.

Cooperative learning techniques provide an effective means of structuring class discussion in small groups. These cooperative approaches have well-documented positive effects on student achievement and thinking, development of communication skills, inter-group relations, and learner self-esteem. They are particularly effective in classes promoting respect for cultural diversity.

The following five components must be in place in order for groups to experience cooperative learning.

- Positive interdependence, all students in a group perceive the yare linked together to succeed. A sink or swim situation exists. If one person fails, they all fail and vice versa.
- Face to face promotive interaction, each student in a face to face manner promotes the learning of other students by assisting, supporting, encouraging, and praising each other's work. Students explain to each other how they solved problems, how new learning relates to old learning, and what concepts are involved.

- Individual accountability and personal responsibility. Each student is individually accountable to him or herself and to each other. Group members must learn who needs more help than others, support, and encourage each other. No hitch-hiking of one member on another is allowed.
- Interpersonal and small group skills. Group members need to develop group skills in order to help each other. Students must get to know each other, communicate accurately and unambiguously, accept and support each other and resolve conflicts constructively.
- Group processing. Students discuss and reflect on how well they are meeting the group goal(s). Students describe helpful and unhelpful actions and make decisions to change. Processing helps students to maintain and promote good working relationships, facilitate learning of cooperative skills, ensure members get feedback on levels of cooperation, ensure students are thinking on a metacognitive as well as cognitive level and provide a means and reasons for celebration of success.

Putting the components together and making sure each learning group is performing well in all areas is not simple. However, adults take naturally to cooperative learning and they will readily adapt. Teachers will find their role becomes easier with time.

A Comparison of Cooperative Learning and Traditional Small Group Learning	
Cooperative Learning Groups	**Traditional Learning Groups**
Positive Interdependence	No Interdependence
Individual Accountability	No Individual Accountability
Heterogeneous	Homogeneous
Shared Leadership	One Appointed Leader
Shared Responsibility for Each Other	Responsibility for Only Oneself
Task and Maintenance Emphasized	Only Task Emphasized
Social Skills Directly Taught	Social Skills Assumed and Ignored
Teacher Observes and intervenes	Teacher Ignores Group Functioning
Groups Process their Effectiveness	No Group Processing

Cooperative learning is essential for the workplace. Much of what students learn in school has little relevancy to the job. Employers do not expect people to sit in rows and compete with colleagues without talking to them. Conversely, most jobs require employees to cooperate with each other to get the job done. Helping each other to solve problems is a vital part of an employee's job and employers expect them to be able to perform this problem solving. Cooperative learning within the classroom is an excellent foundation for teamwork, problem solving, effective communication, interpersonal skills, and social group processing.

As learners participate in working within their cooperative group, they achieve an understanding of other's values, attitudes, and variety of life experiences. Learners find group support for what they can do and improve their own self-esteem. Learners may experience success for the very first time. They also find they perceive problems differently from the way other people perceive them. Positive group interactions help learners to build a sense of autonomy, belonging and elf-worth they may not have experienced anywhere else.

Teachers who choose to use cooperative learning methods must be willing to promote constructive relationships among the learners. Constructive relationships building will require:

- Establishing a common goal for learners to achieve through teaching objectives
- Emphasizing joint projects/lessons with separate roles and responsibilities that each learner contributes.
- Directly teaching the interpersonal skills needed to build and maintain collaboration.
- Emphasizing to learners they are responsible for the well-being and success of their peers.
- Encouraging feelings of support, acceptance, concern, and commitment in each learner for collaborative situations.
- Instilling a sense of accountability in fulfilling roles and responsibilities.
- Ensuring learners experience success in working collaboratively with their peers.
- Summarizing of the teacher's role in Cooperative Learning
- Clearly specifying objectives for the lesson.
- Making decisions about placing students in learning groups before the lesson is taught.
- Clearly explaining tasks, cooperative structure, and the social/relationship skills needed for learning activities.
- Monitoring effectiveness of the cooperative learning groups and intervene to provide task assistance such as answering questions about the assignment. In addition to make sure the process moves forward through maintenance through teaching social/relationship skills such as paraphrasing, respectful listening, consensus seeking, etc.
- Evaluating achievement and help students discuss how well they collaborated with others.

Getting Started

For optimum learning and sharing, it is suggested groups be from two to six members. When assigning students to groups, teachers should consider mixing people with varying levels of abilities and interests. It is also enriching for students to change groups after learning goals are accomplished and new ones are set. Each student in a

group should have an assigned role depending upon tasks and projects. Roles should be rotated within the group.

Before using cooperative learning methods in the classroom, teachers should explain the process and the five essential components to be emphasized in their groups. After groups are organized, the first project should be one of introduction so each member learns about the other people in the group. Introductions should include strengths of each person. Following the introduction, each group should develop a logo with a name that represents the strengths of the group; this will help solidify the group. The teacher should then follow guidelines for the role of a teacher in this methodology (see the sample activity).

Cooperative learning may not be appropriate for every class or lesson. As the teacher, you are encouraged to use this strategy when it best fits the course content and competencies to be learned.

Cooperative Learning Strategies

Corners

Students divide into four large groups. Each group has a teacher-determined topic and set of discussion questions. The groups discuss answers to the questions or join partners and form new discussion teams.

Three Step Interview

Commonly used as an ice-breaker or team building exercise, this structure can be used to share information such as hypotheses or reactions to a film or article. Students interview one another in pairs, alternating roles as interviewer and interviewee. They then share in a four-member learning team the information or insights gleaned from the paired interview.

Numbered Heads Together

Members of learning teams usually composed of four students, counts off as one, two, three, or four. The teacher poses a question, usually factual in nature, but requiring some higher order thinking skills. Students then discuss the question, making certain that

every group member knows the answer. The teacher calls a specific number and the designated team member respond as the group spokesperson. Again, students benefit from the verbalization and peer coaching helps both high and low level achievers. Class time is usually better spent because less time is wasted on inappropriate responses and all students become actively involved with the material. Each student has a vested interest in knowing the appropriate response since no one knows which number the teacher will call.

Roundtable

A brainstorming technique, students write in turn on a single pad of paper, stating their ideas out loud as they write. As the tablet circulates, more and more information is added until various aspects of a topic are explored.

Talking Chips

To structure discussion and encourage full participation, each team member shares information and contributes to the discussion after placing a talking chip in the center of the group. After all students have contributed in random order, they retrieve their chips to begin another round.

Co-op Cards

Useful for memorization and review, students coach each other using flash cards.

Simple Jigsaw

The teacher divides an assignment or topic into four parts with all students from each learning team volunteering to become experts on one of the parts. Expert teams then work together to master their fourth of the material and to discover the best way to help others learn it. All experts then reassemble in their home team where they teach the other group members.

Structured Controversy

Team members assume different positions on controversial issues, discussing, researching, and sharing with the group their findings. This technique allows students to explore topics in depth and promotes higher order thinking skills.

Group Investigation

Based on six successive stages, cooperative groups investigate topics of mutual interest, planning what they will study, how they will divide the research responsibilities, and how they will synthesize and summarize their findings for the class.

Summary

Objectives, class knowledge, time, class size and nature of the subject matter are some factors to consider when choosing an instructional method. The methods presented in this course were lecture, directed discussion, demonstration, practice and cooperative learning and are ways to involve students in learning. The effective teacher will vary methods appropriately.

Students who are learning new skills and information will benefit from repetitive teaching. You may want to structure your course through a pre-assignment, lecture, directed discussion, demonstration, practice format or a variation thereof. It has been noted that repetition will build on and reinforce learning of new materials and skills.

Sample Cooperative Learning Team Building Activity

Each student will be a member of a group. Form groups of four-six people Groups.

TASK: Introduce yourself to one other person in the group. Give your name and where you are from and your greatest strength (what you are best at doing or being, etc). Make notes if necessary. You will introduce each other to the remaining members of the group. Next, develop a name and logo that represents each member of your group. Each group has 20 minutes to complete this project.

*Choose Roles

Instruction Giver/Timekeeper-Your group has 20 minutes, makes sure everyone understands the instructions.

Reporter-Will have one minute to explain the mane and logo to the class as a whole.

Resource Person-Picks up supplies and provides praise throughout the activity.

Facilitator/Recorder-Make certain each person helps in deciding the name and has hands-on experience in making the logo. Make sure each person signs his or her name to the logo.

Be ready to report in 20 minutes!!! Reporter will explain to the re-assembled large group what your logo and name represents.

*Members of your group should rotate roles so that each person experiences each task.

Collaborative Group Work

Cooperative group learning is an excellent teaching methodology in a course that requires strict, teacher led organization. Another group teaching method for consideration is collaborative group work, although collaborative is more of a teaching philosophy than a method. Both collaborative and cooperative learning are based in a constructivist philosophy of education. The main principles of constructivist are bulleted below:

- Knowledge is constructed, discovered, and transformed by students. It is the teacher's job to create a learning environment conducive for students.
- Learning is active, it is intrinsic, not an extrinsic process.
- Teachers' goals are to develop student talent.
- Learning is interactive between teachers and students, and students and students.
- Education can only occur in a cooperative environment.
- Teachers require considerable training in methodology with requirements for continuing education in methodology.

The major difference between cooperative group work and collaborative group work is the philosophy behind each methodology. Cooperative work is structured to facilitate specific goals or products. Cooperative work is assigned, assessed, and strictly controlled

by the teacher. Even though there is value in cooperative group work, it does not empower students because of the strict guidelines controlled by the teacher.

Collaborative group work gives the responsibility of the process, goals, and assessment of products to the group. This group work empowers students to make the decisions about how the process will be completed and the assessment of the end product. In collaborative methodology the group is responsible for the answers to a problem in its entirety. The group decides if they have enough information or if they need to perform further research. The group divides the work among its members. Even though the teacher is present and checking on groups, the group makes decision about when they have the answers and how in depth the answers should be. Teachers consult, guide, help the groups assess progress and assist with conflict resolution. The assessment of the completion of the project or meeting of a goal is done in conjunction with the group and the teacher. The responsibility for the open ended process and the outcomes relies on the students. Students develop socially and educationally and a strong ownership of the work.

Types of Knowledge Appropriate for Cooperative and Collaborative Group Work

Cooperative group work is best for foundational knowledge, or information that is basic. Basic knowledge is information that represents beliefs everyone in a society can agree on, such as spelling, grammar, math, history, are example of foundational knowledge.

Collaborative group work is best for nonfoundational knowledge, or information that is derived through reasoning and questioning. This information cannot be found through rote memorization, but must be sought through a process.

Suggestions for Collaborative Group Work

There are some basic techniques to use, regardless of the overall procedure used. Each student must recognize they are part of the team and take responsibility for participating in the team. The success of the group relies on each student's input and efforts. Additionally, each student must recognize the success of the group is shared by all members.

Think-Pair-Share-Students are given the question and think through it on their own. They then discuss with another student and form a consensual answer to share with the reset of the class.

The Jig Saw-Students are provided with a concept, become the experts on that concept, then teach it to the rest of the group. The entirety of the class can subdivide a topic into smaller sets, then send representatives from each group to smaller groups designed to investigate the subdivided topics. The representatives then go back to their original group and teach about their topic.

Module 5 Quiz

Fill in the blank(s) or mark the letter of the correct answer for each question below:

1. All information in a basic class is so structured the class environment must be knowledge based.
   A. True
   B. False

2. Lecture methodology is good to use when relaying _____ information to students.

3. List the three steps in teaching using a directed discussion.

_____ _____

_____.

4. List two of the four required characteristics of a directed discussion question.

_____ _____.

5. Directed discussion requires the teacher to repeat student responses to make sure the understanding is the same for everyone.
   A. True
   B. False

6. List two of the four values of the use of demonstration as a teaching method.

_____ _____

7. List the six steps to use to present a demonstration.

_____

_____

_____

_____

_____

_____

8. Students can learn the basic concepts of a procedure during a practical exercise.
   A. True
   B. False

9. List the five steps to use to prepare a practical exercise.

_____

_____

_____

_____

_____

10. List two types of practical exercise.

_____

_____

11. Write a paragraph on the value of role-play teaching methodology in a basic health care provider class.

12. List three components that must be in place for cooperative learning to take place.

13. List three cooperative learning strategies. _____

_____ _____.

14. The major difference between cooperative group work and collaborative group work is the _____.

15. Cooperative learning is best used for _____knowledge, while collaborative learning is best used for _____ knowledge.

Module 5 Activity

Answer each question with a short paragraph or two. Your answers should be type written or computer generated in at least font 12 using Times New Roman or Arial. You should email, mail or give your answer sheet to the teacher for each module as you finish it. Thank you for your work in this class. Please feel free to include any comments for improvement, or items that helped you through the course as you move through each activity.

1. Think about the class you plan on teaching after taking this course and list four teaching methods you will use in your class. Describe why you will use that method in your class and how you expect the students to benefit from its use. Please describe how you will overcome the limitations of the teaching methodology you have chosen.

MODULE 6: Classroom Presentation

Performance Objective for Module 6

Given information regarding classroom presentations the student will describe their own presentation style. The description will be considered successful if the student includes at least five considerations of information from this module and all previous modules in their own style.

Introduction for Module 6

Every person has an individual style and personality and each person operates at differing levels in their profession of choice. Often times, the subject matter to be taught is dictated by a regulating agency. However, how you present the information and lessons is personal choice. It may be difficult to know how to bridge your knowledge to students to promote learning. You have learned a great deal of information about how adult students learn and how to set up a class for optimizing student learning experiences.

This chapter will assist you to begin reflecting upon your own style and begin to develop a philosophy of education you can use in teaching.

Presentation

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Planning

Classes you present will have restrictions such as time, content, space, student numbers, budget, etc. A good plan prior to teaching can make the difference between a class in which students learn, and one in which they leave scratching their heads wondering why they wasted their time.

The first step in planning is to know the content you have to teach. Your class may have a required curriculum which includes specific objectives that have been

developed by employers, state regulation agencies, or national agencies. In this case, you must read the curriculum and know the objectives you will be required to teach. If you are not provided with a specific curriculum, you will begin your planning by developing specific content objectives. This step would be the beginning of your lesson plan, which will be covered in a later module within this class.

When you plan a class, you should have an idea the students who will attend. A general idea of how many students you will have and a basic level of knowledge at which they will enter is important for you to consider in planning your class sessions.
This portion of the process is also when you as the teacher would decide upon your teaching aids and how each objective would best be delivered.

Classroom Considerations

In a perfect world your classroom will be large and contain all the teaching aids you will need to deliver your curriculum. In actual experience this may or may not hold true. In either case, you as the teacher should be aware of where your class will take place. You should survey, or at least be informed about the room before class to plan for the best delivery of information. At a minimum, you must make sure the room is well-heated or cooled, well-lit, and ventilated. The room also must be quiet and free of distractions. If students become uncomfortable, they will not be able to learn.

You should ensure the audio-visual equipment indicated in your plan is available. If it is not already in the room, make arrangements for it to be provided, or provide for it yourself. If you have video tapes to show, set them up to begin at the section you wish to show. This will avoid wasting time searching for the beginning spot in class.

When possible, survey the classroom set up before your session begins. Make sure the student set up will support student learning and the presentation methods you have chosen.
Always be prepared for unexpected situations to occur. For example, you have more students than was preplanned, or a piece of equipment or technology does not perform as expected.

Presentation Techniques

Presenting information to a class of students is often a daunting task. One that serves to frighten beginner teachers, and presents challenges as to how to keep it interesting, to those who have taught for years. As an industry expert, you have probably taken classes and attended workshops. Take a moment and think back on all the presentations you have attended. Think of a particularly good experience, and then dissect that experience. What made it good? Was the subject interesting to you? Did the presenter or teacher make a boring subject interesting? Was you able to make sense of the information, and if you were, what was it about the presentation that made it make sense?

Once you have planned your presentation with your lesson plan, you should have thought through all the teaching aids you will need, and made sure you will have access to them. You should also have decided how you are going to present the information, through a lecture, demonstration, video presentation, or discussion. Now you are faced with how to actually present the material.

Presentation techniques will play an important part in how much your students will learn. Presenting as a teacher has similarities to public presentations. You should know the material you are presenting. If you are unsure, look it up. But, if you do not know, answer student questions honestly and let them know you will get back to them with the answer, and then follow through. Adult students are OK with the teacher not knowing all, they are not OK with the teacher trying to fake their way through answers. The follow through, when you tell students you will find answers for them is necessary to establish the trust required for learning to occur.

Practice before you get to the classroom! You should always practice your presentation before the initial debut. Make sure your video is ready at the spot you want to begin, if you are showing a video. Make sure you have all the notes for the lecture you want to deliver. If you are going to give a demonstration make sure you have all the equipment you need, and that all students will be able to have a direct line of sight to what you are demonstrating. It is helpful to make your demonstration as contextually appropriate as possible. If you are going to teach how to take a blood pressure, teaching it contextually will help students transfer the learning to a different setting.

Know who you are teaching. Each class you teach will have a completely different group personality. Get to know your students and how they interact as a group. Learn what their level of knowledge is, if your group is diverse, as is often the case, use students who have experience to assist the novice students. First make sure the experienced students know correct procedure though, as they may have learned the skill or information incorrectly. A quick formative assessment should allow you to learn what each student knows about the subject you are teaching.

Know your classroom; make sure it is set up for the learners. Ensure all students can see you as you present, even when you lecture. You will loose student interest and they will become frustrated if they cannot see you as you speak or demonstrate.

Be enthusiastic, but relaxed. If you are nervous, you will present poorly. Keep in mind the students are there to learn what you know. Do not worry that you will be perfect, no one expects perfection, and do not overly apologize if you make a mistake, acknowledge your error and continue. Adult learners will not spend the time to attend a class they do not perceive as being helpful to them and their present situation. If you believe in what you are teaching, they will believe in what they are learning.

Speak clearly, and avoid using terminology not understood by your student group. It is easy, as an expert to forget that not everyone understands the language of the occupation. Make sure you are looking at your students, survey the crowd and notice if you are holding students' interest. Eye contact is a good way to draw students into your presentation. Vary your tone of voice, use dramatic pauses to emphasize a point, move around the room. Avoid the monotonous monologue that puts people to sleep. Speak for 10 minutes at a time, then vary the presentation with a short discussion and involve students. Adults usually have busy lives and if you speak for extended periods of time, they will drift off and loose the information you are trying to impart

Watch your posture, and your body language. Your students will believe more of what you say to them non-verbally than they will your spoken words. Animated lecturing posture will impart enthusiasm and a belief in what you are teaching.

If you ask students if they understand, wait for a response. Do not just ask for the sake of asking. Look at the student group when you ask and note the body language messages you are getting. If people look puzzled, ask if they need more clarification.

Learn to laugh at yourself. Things will go wrong even for the most polished teacher or presenter. Again, think back to a class you found particularly effective. Was the teacher perfect? If something went wrong, how did the teacher handle it? Technology fails, if you have a power point presentation and can't get the projector to work, how will you handle deliverance of the information? Keeping a sense of humor will add to the presentation of information and prevent heavy, dry, monotony.

Ask for feedback from your students. Ask them to be honest, and then heed their perceptions. It is difficult at times to be objective about oneself. Others can help you to learn and grow as a teacher and presenter of information. However, do not take it personal, take the feedback as a great opportunity to hone your skills and become the best teacher you can.

Presentation Format

You should format your presentation with your lesson plan, before you begin. Introduce the subject for the lesson; let students know what they can expect from the lesson and what they are expected to learn. In addition, you should let the students know how they will be evaluated for success once the lesson is finished. Adults want to know what is expected of them so they can participate accordingly. A well thought out syllabus or course outline will provide students information about what they can expect as the class sessions progress. However, beware providing students an outline, then not following it. Adult students may become frustrated and loose motivation, which will decrease the effectiveness of your class overall.

When you are planning your presentation decide how much time you have for the lesson. Be realistic when planning, give yourself time to describe the activities, adequate time for presentation, and time for a summation of the teaching you did during the lesson. The times required depend upon the subject to be taught and the depth of learning. Beware of trying to present too many disconnected facts and information in a short time and avoid having a curriculum that is a mile wide and an inch deep. Students may leave with information to memorize, but without the ability to use the knowledge in any semblance of fluency with which to assemble it into context in a workplace setting.

Adult students have busy lives outside of the classroom and the lesson must end on time. Careful planning will allow a well thought out time line for your classes. Make sure you have enough time for your introduction, presentation and closing summary. If an evaluation is required make sure you have time for the students to finish, without feeling hurried.

Behavior Rules for the Classroom

You may see student behavior problems as a teacher. To avoid issues with students who disrupt learning for others in the class it is helpful to set up standardized behaviors in a classroom. You as the teacher then must demonstrate the behaviors and become a role model for students. The nature of your class will dictate which rules you wish to set in place. If it is a class to help students learn soft skills in a work setting, such as team work, punctuality, or appropriate dress codes you may want to address these issues in your rules. If the class objectives require students learn to think independently, you might address issues regarding independent thought processes.

One rule that is helpful in today's technological society is that cell phones will be turned off while class is in session, this includes the teachers. When you develop a list of rules, make sure to include consequences for breaking the rules. This is important if rules are to be taken seriously by students. Curricula requirements may dictate the consequences. For example if a certain amount of classroom time is required by a regulating agency, then students must know if they miss more than a preset amount of time, they will not be successful in the course.

Be careful to not institute rules for the sake of having rules. Make sure the rules you set add to the class information. Additionally, make sure you enforce the rules you put forth. If students read in the syllabus that they will be required to wear a certain attire, such as casual business or scrubs, do not ignore that rule. Students may become frustrated or confused and this will detract from learning. The students who do follow the rules may become resentful that others are not held to the standards.

Behavioral Issues

Adult learners, in general, will be enthusiastic and self-motivated learners. They usually are in your class because they have an internal need or desire to learn the

information. The internal motivation may not be known to you as the teacher. That being said, as with all things in life, there will be exceptions. Students may be in your class for a number of reasons. They may feel they know all the information but have to formalize their education to receive recognition by the state in order to practice. They may have been placed in a class by their employer for a refresher or as a requirement to continue their employment. How do you work with people who do not want to be in your class, or want to be in class to avoid other duties? It is difficult but a few tips will be provided here.

Sightseer

This person will be in class to avoid the routine of their "other life." They will enjoy the fact they do not have to answer the phone, or perform their routine tasks and have time to relax. They may or may not pay attention in class, arrive late, leave early, take extended breaks and not complete assigned work. It is helpful to have firmly established behavior rules for the classroom for these people. A syllabus with clearly stated attendance, behavior, participation, and assignment expectations is a good idea. If the person does not respond, having a one on one session to reiterate expectations may be needed.

Hostage

The hostage is resistant to the class. They will be closed to learning and participation in the class. This might be displayed through body language, with crossed arms, legs, and a blank, disinterested, or angry facial expression. This may be the person who is in the class for remedial or employment purposed, paid for by the employer as a

requirement for their position. This might also be someone who already feels they know the material but are being forced to take the class for initial or continuing certification.

It is difficult to work with someone who feels this way. It might help to acknowledge the skills they have. Involving them in helping students learn skills of information may draw them into the spirit of learning. Adults enjoy cooperative learning, and being able to share their experience and knowledge.

Dominator

This person may love learning and want to be a good student. However, they tend to take over the class and answer questions before others, or ask all the questions. Even though it is not a bad thing that they want to participate, you must let other students participate.

It might be helpful to speak with the student, let them know you appreciate their enthusiasm and participation, but ask them to let other students have a chance.

Executive

The executive will feel they are doing you a favor by attending your class. They already know all the information and there is nothing you can teach that will be useful to them. They may have a cell phone that frequently rings, or they may need to leave class to take care of important business.

Again, it would be helpful to pull this student into the class through a cooperative learning situation. Beware though; make sure the student does know what he or she is doing. Students may have the incorrect perception they know what they are doing.

Panic Stricken

The panic stricken student is so worried he or she will not pass the class they cannot pay attention. Their panic can affect the entire group dynamics. The students may or may not have problems in class and with evaluations.

It is helpful to give these students the syllabus before classes begin. Give them concrete information and lots of feedback on their performance in the class.

Mind Games

Students who play mind games may do so for many reasons. They may feel they already know the material, or just have that type of personality. In any case they may try using techniques such as constant repetition of an issue, dominating the class and taking control from the teacher, constant interruption of the class, begin side conversations, or pout during class to the point it becomes disruptive. In any case dealing with the student directly does not always work and you may have to work with them outside of class time. It is best to be direct, open, honest and fair to all students.

Module 6 Quiz

There is no quiz for module 6, please move on to the Module 6 Activity.

Module 6 Activity

Answer each question with a short paragraph or two. Your answers should be type written or computer generated in at least font 12 using Times New Roman or Arial. You should email, mail or give your answer sheet to the teacher for each module as you finish it. Thank you for your work in this class. Please feel free to include any comments for improvement, or items that helped you through the course as you move through each activity.

1. Reflect on the class you plan on teaching after you finish this instructional course, and then reflect on your style of presentation. Develop a learning objective for your course and how you plan on presenting it to your students. Use the concepts from this module and all the previous modules and be sure to include at least five points that will affect your presentation style.